

# Birding 101: winging it in the Bay Area

Have you ever wandered over to the Central Cafeteria for some midday refueling and wondered, "What was that interesting looking bird wading along the banks of the basin?"

Or perhaps you have been hard at work in your office when the high-pitched song of a visiting passerine left you hopelessly distracted, asking "What kind of bird is that and when is it going to stop singing?" Well, satisfy your curiosity and take a virtual birding excursion around the basin for Birding 101: Avian Identification.

Our journey begins along the basin's southern banks on a cool and misty December morning when we spy a large, graceful predator slowly wading through the shallows. His pace is purposeful, taking one step every 3-5 seconds so as not to alert anyone of his presence.

Suddenly, in a blink of an eye, he thrusts his spear-like bill into the cold water and captures the first course of his fish breakfast. After quickly consuming his tasty prey, this avian visitor realizes he is being watched and with long, slow wing beats he uses his six-foot wingspan to lift himself from a productive fishing hole and casually glide to the next one.

After noting this bird's foraging behavior, flight pattern, and size, we determine that it's some type of heron (Family *Ardeidae*). Now we must use our field guides and visual acuity to identify the species. As we stealthily watch the heron, the puzzle pieces slowly fall into place.

One person calls out, "I see a white face, and dagger-like yellow bill with a black tip; he also has a broad, black eyestripe that extends off the head." Another person adds, "His body is primarily a blue-gray color; he's got a black shoulder patch and long yellow legs." Congratulations. You have just successfully identified your first Great Blue Heron (*Ardea herodias*), a sporadic visitor to LLNL.

Our birding journey continues along the basin's west bank during a mild, sunny February afternoon



By Brian Spirou



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Top left: Black Phoebe (*Sayornis nigricans*), on a sally perch. Center left: The Pied-billed Grebe (*Podilymbus podiceps*) is a

common visitor to the basin and an open water specialist. Pied-billed Grebes are strong swimmers and pursue prey by diving to catch aquatic invertebrates and small vertebrates. Lower left: The Green Heron (*Butorides virescens*) is a small wading bird that specializes in slow stocking off prey within the shallow water margins of the basin. Green Herons prey upon fish and aquatic invertebrates. Above: The Snowy Egret (*Egretta thula*) is a showy wading bird, that similar to its relatives pursues prey within the shallow margins of the basin. Egrets tend to be easily disturbed, so the best time to see one is either early in the morning or in the evening when the basin is calmer and the area has less foot traffic.

when a broken series of "tee-hee, tee-hoo's" are heard that peak at a high note and then drop in the second phrase. Curious about what is making this sound, we patiently scan the shoreline and eventually notice a small bird sitting atop an exposed branch. The bird

swoops off its perch and embarks on a quick, circular flight path over the water and then perches again. Someone announces, "It's a flycatcher (Family *Tyrannidae*) hunting for insects." Yet, there are 36 flycatchers in the west, which one is it?

We notice that she is about six inches in size and, while perched, she bobs her tail. Black plumage covers her entire back and a slight tuft on her head. When she turns, her white belly and tail feathers are revealed — it's a Black Phoebe (*Sayornis nigricans*).

Despite this quick journey, avian identification is less daunting now. First, we simply make behavioral observations: foraging behavior, flight pattern, song, and unique characteristics like the Black Phoebe's tail bob.

When combined with observations of broad physical characteristics (e.g., size, shape), these serve to identify the family or subfamily for this bird, thus simplifying the avian identification process. Detailed physical characteristics (e.g., plumage coloration, beak shape) and other helpful considerations such as preferred habitat (is the bird typically seen in a woodland, marshland, etc.?) and residency status (When can one expect to see a certain bird in this part of California? Is it a migrant species?) then can be used to identify the species.

The next time you need a break, why not head over to the basin for a birding identification excursion. Or why not load up the family and share your newly acquired birding skills at one of the great parks listed below? Don't forget your binoculars (offsite only), field guide (try *National Geographic's* Field Guide to the Birds of North America), notebook and camera. Birding is a great way to spend a day together. And it gets kids fired up about science.

Want more bird identification information? Check out Cornell University's Website (<http://www.birds.cornell.edu/programs/AllAboutBirds/BirdGuide/>) or contact summer intern Brian Spirou at [spirou2@llnl.gov](mailto:spirou2@llnl.gov).

## Great parks for birding

- Sycamore Grove Park (Livermore)
- Berkeley Aquatic Park (Berkeley)
- Coyote Hills Regional Park (Fremont)
- Don Edwards National Wildlife Refuge (Fremont)
- Tilden Park and Wildcat Canyon (Berkeley)
- Henry Coe State Park (Morgan Hill)
- Martin Luther King Jr. Regional Shoreline (Oakland)
- Big Basin State Park (San Mateo County)
- Golden Gate National Recreation Area (Sausalito)
- Point Reyes National Seashore (Marin)

## Look for these other birds in, around the basin

Bufflehead (*Bucephala albeola*)  
Pied-billed Grebe (*Podilymbus podiceps*)  
Lesser Scaup (*Aythya affinis*)  
Ruddy Duck (*Oxyura jamaicensis*)  
American Coot (*Fulica americana*)

Killdeer (*Charadrius vociferus*)  
Greater Yellowlegs (*Tringa melanoleuca*)  
Green Heron (*Butorides virescens*)  
Great Egret (*Ardea alba*)  
Cattle Egret (*Bubulcus ibis*)